

Claims

1. An air-suspension system for a vehicle, comprising at least one air-suspension bellows (64, 65, 66, 67) which, via a valve arrangement (3, 60, 61, 62, 63), can be placed in communication with at least one further component (1, 2, 4) of the air-suspension system, in order to selectively increase or decrease the compressed-air quantity contained therein, the further component (1, 2, 4) containing at least one volume (10, 15), characterized in that there is provided, between the valve arrangement (3, 60, 61, 62, 63) and the volume (10, 15), a check valve (50, 51), which prevents a compressed-air flow between the at least one air-suspension bellows (64, 65, 66, 67) and the volume (10, 15) in one flow direction.
2. An air-suspension system according to claim 1, characterized in that the check valve (50, 51) is connected directly to the valve arrangement (3, 60, 61, 62).
3. An air-suspension system according to at least one of the preceding claims, characterized in that the volume (10, 15) has a first partial volume (10) and a second partial volume (15) isolated therefrom.
4. An air-suspension system according to claim 3, characterized in that there is provided a first check valve (51), which prevents a compressed-air flow from

the first partial volume (10) into the at least one air-suspension bellows (64, 65, 66, 67).

5. An air-suspension system according to claim 3 or 4, characterized in that there is provided a second check valve (50), which prevents a compressed-air flow from the at least one air-suspension bellows (64, 65, 66, 67) into the second partial volume (15).
6. An air-suspension system according to at least one of the preceding claims, characterized in that the further component (1, 2, 4) of the air-suspension system is provided with a compressed-air delivery device (1).
7. An air-suspension system according to claim 6, characterized in that the first partial volume (10) is disposed on the intake side of the compressed-air delivery device (1).
8. An air-suspension system according to claim 6 or 7, characterized in that the compressed-air delivery device (1) is provided with a compressor (12).
9. An air-suspension system according to claim 8, characterized in that part of the compressor (12), especially the crankcase, forms part of the first partial volume (10).
10. An air-suspension system according to claim 8 or 9, characterized in that the first partial volume (10) is

formed substantially by part of the compressor (12), especially the crankcase.

11. An air-suspension system according to claim 6,
characterized in that the second partial volume (15) is disposed on the outlet side of the compressed-air delivery device (1).
12. An air-suspension system according to at least one of claims 8 to 11, characterized in that part of the compressor (12), especially the outlet chamber, forms part of the second partial volume (15).
13. An air-suspension system according to at least one of the preceding claims, characterized in that the further component (1, 2, 4) is provided with at least one air-discharge/dryer device (2).
14. An air-suspension system according to claim 13,
characterized in that the air discharge/dryer device (2) is provided with at least one air dryer (21).
15. An air-suspension system according to claim 14,
characterized in that the air dryer (21), especially the air-dryer cartridge, forms part of the second partial volume (15).
16. An air-suspension system according to claim 14 or 15,
characterized in that the second partial volume (15) is

formed substantially by part of the air dryer (21), especially the air-dryer cartridge.

17. An air-suspension system according to at least one of claims 13 to 16, characterized in that the compressed air flows through the air-discharge/dryer device (2) in the same direction in all operating conditions of the air-suspension system.
18. An air-suspension system according to at least one of the preceding claims, characterized in that the further component (1, 2, 4) is provided with an air-intake device (4).